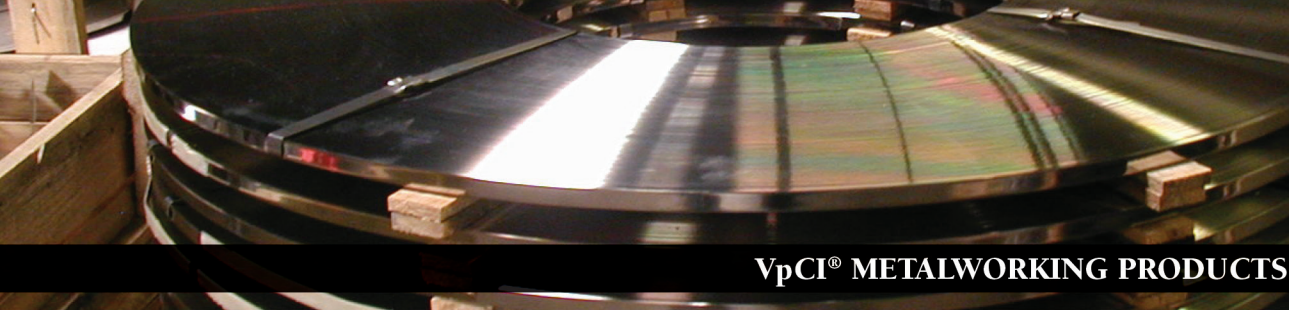
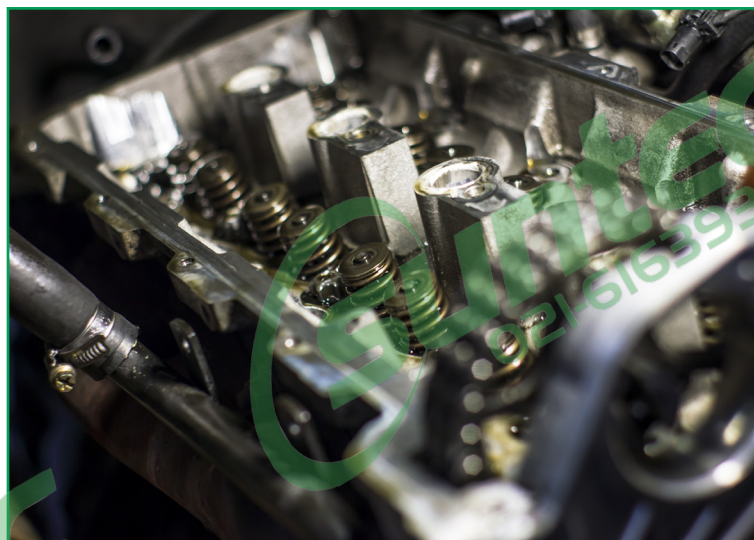




VpCI® METALWORKING PRODUCTS

VpCI®-329



PRODUCT DESCRIPTION

VpCI®-329 is an oil-based vapor corrosion inhibiting concentrate for use with lubricating, hydraulic, and preservation oils, and provides excellent protection in sheltered outdoor/indoor conditions. VpCI®-329 protects in two unique ways by offering a tenacious film, which clings to metal surfaces as well as vapor phase inhibitors into the air above the oil. The vapors condense and form a protective barrier on metal surfaces that are not in contact with the oil. This combination allows complete protection to internal system parts.

FEATURES

- Contains no hazardous chromates, nitrites, or phosphate inhibitors
- High flash and fire points
- Protects ferrous metals, zinc, galvanized steel, aluminum, copper, and brass.
- Compatible with most oils
- Can be fogged into metal compartments
- Parts can be dipped and stored
- VpCI®-329 provides good salt spray resistance
- NATO #6850-66-132-6100 / NSN #6850-01-470-3359
- VpCI®-329 is commercial equivalent to MIL-PRF-46002C (Grade 1)

METHOD OF APPLICATION

Short-term protection: One part VpCI®-329 to 19 parts oil.

Medium-term protection: One part VpCI®-329 to 9 parts oil.

Long-term protection: One part VpCI®-329 to 4 parts oil.

Storing metal parts: Spray, dip, or brush VpCI®-329 onto metal parts before storage.

Storage for lubricating, hydraulic, and metal cutting systems: Add Cortec® VpCI®-329 to oil in engines before storage. For best results, add VpCI®-329 to the oil, then cycle or run the engine for 10 minutes before shutdown.

TYPICAL PROPERTIES

Oil Characteristics	Typical Values	
Appearance	Opaque Tan Color	
Specific Gravity	0.91	
Viscosity (ASTM D92)	40 °C	51.4 cSt
	100 °C	8.1 cSt
	Index	129
Pour Point (ASTM D6749)	-37 °C (-35 °F)	
Flash Point (ASTM D92)	164 °C (326 °F)	
Fire Point (ASTM D92)	164 °C (328 °F)	
Total Acid Number (ASTM D974)	mg KOH/g	26.9
Oil Separability (ASTM D1401) @ 82°C (180°F)	Oil, ml	0
	Water, ml	0
	Emulsion, ml	80
	Time, min	60
Foaming Characteristics (ASTM D892)	Seq. I	365/290/600+
	Seq. II	435/350/600+
	Seq. III	340/260/600+

Properties listed above are typical of those obtained through normal production and do not constitute a specification. VpCI®-329 is generally soluble in hydrocarbon based fluids, however compatibility and solubility should be verified prior to use. Please contact Cortec® Technical Service for more information.



STANDARD TEST METHODS

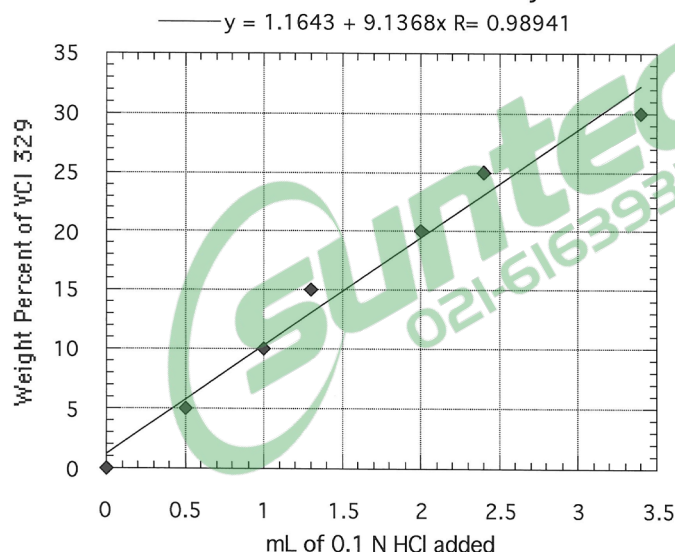
ASTM D-1748	Humidity Cabinet	600+ Hours
ASTM B117	Salt Spray	100 Hours

PACKAGING AND STORAGE

VpCl®-329 is packaged in 5 gallon (19 liter) plastic pails, 55 gallon (208 liter) metal drums, totes, and bulk. The product should be sealed before storage. Agitate before each use. The shelf life of VpCl®-329 is up to 24 months.

VCI 329

Determination of Concentration by Titration



FOR INDUSTRIAL USE ONLY
KEEP OUT OF REACH OF CHILDREN
KEEP CONTAINER TIGHTLY CLOSED
NOT FOR INTERNAL CONSUMPTION
CONSULT SAFETY DATA SHEET FOR MORE INFORMATION

LIMITED WARRANTY

All statements, technical information and recommendations contained herein are based on tests Cortec® Corporation believes to be reliable, but the accuracy or completeness thereof is not guaranteed.

Cortec® Corporation warrants Cortec® products will be free from defects when shipped to customer. Cortec® Corporation's obligation under this warranty shall be limited to replacement of product that proves to be defective. To obtain replacement product under this warranty, the customer must notify Cortec® Corporation of the claimed defect within six months after shipment of product to customer. All freight charges for replacement products shall be paid by customer.

Cortec® Corporation shall have no liability for any injury, loss or damage arising out of the use of or the inability to use the products.

BEFORE USING, USER SHALL DETERMINE THE SUITABILITY OF THE PRODUCT FOR ITS INTENDED USE,

AND USER ASSUMES ALL RISK AND LIABILITY WHATSOEVER IN CONNECTION THEREWITH. No representation or recommendation not contained herein shall have any force or effect unless in a written document signed by an officer of Cortec® Corporation.

THE FOREGOING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE. IN NO CASE SHALL CORTEC® CORPORATION BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.



CORTEC
CORPORATION

Environmentally Safe VpCl®/MCI® Technologies

4119 White Bear Parkway, St. Paul, MN 55110 USA
Phone (651) 429-1100, Fax (651) 429-1122
Toll Free (800) 4-CORTEC, E-mail info@cortecvci.com
<http://www.cortecvci.com>

Printed on recycled paper  100% post consumer

Revised: 09/28/17. Supersedes: 09/15/2016. ©Cortec Corporation 2002-2017 of Cortec Corporation.
All Rights Reserved. Copying of these materials in any form without the written authorization of Cortec Corporation is strictly prohibited. 2017, ©Cortec Corp. ISO accreditation applies to Cortec's processes only.

Distributed by: